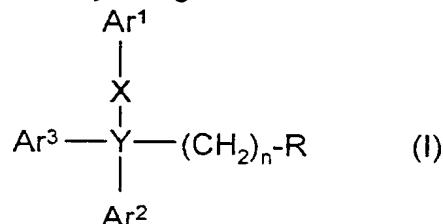


CLAIMS:

1. Use of a chemical compound having selective IK_{Ca} modulatory activity for the manufacture of a medicament for the treatment, prevention or alleviation of a disease or a disorder or a condition of a mammal, including a human, which disease, disorder or condition relates to immune dysfunction.

2. The use according to claim 1, wherein the chemical compound is a triaryl methane derivative represented by the general Formula I



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

15 n is 0, 1, 2, 3, 4, 5 or 6;

20 X is absent, or represent a group of the formula $-(CH_2)_n-$, of the formula $-(CH_2)_n-Z-$ (in either direction), of the formula $-(CH_2)_n-CH=N-$ (in either direction), the formula $-(CH_2)_n-Z-(CH_2)_m-$, or of the formula $-(CH_2)_n-CH=N-(CH_2)_m-$ (in either direction), or a group of the formula $-R'''C(O)N-$;

25 in which formulas

 n and m, independently of each another, represent 0, 1, 2, 3 or 4; and Z represents O, S, or NR''' , wherein R''' represents hydrogen or alkyl;

25 Y represents a carbon atom (C), a nitrogen atom (N), or a phosphor atom (P), a silicium atom (Si), or a germanium atom (Ge);

30 Ar¹, Ar² and Ar³, independently of each another, represents a partially or completely saturated mono- or polycyclic aryl group, or a mono- or polyheterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula $-OR''$, $-SR''$, $-R'OR''$, $-R'SR''$, $-C(O)R''$, $-C(S)R''$, $-C(O)OR''$, $-C(S)OR''$, $-C(O)SR''$, $-C(S)SR''$, $-C(O)NR'(OR'')$, $-C(S)NR'(OR'')$, $-C(O)NR'(SR'')$, $-C(S)NR'(SR'')$, $-CH(CN)_2$, $-C(O)NR''_2$,

~~-C(S)NR"2, -CH[C(O)R"]2, -CH[C(S)R"]2, -CH[C(O)OR"]2, -CH[C(S)OR"]2, -CH[C(O)SR"]2, -CH[C(S)SR"]2, -CH₂OR", or -CH₂SR";~~

*S
C*
5 R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR"(SR'), -C(S)NR"(SR'), -CH(CN)₂, -C(O)NR'2, -C(S)NR'2, -CH[C(O)R']₂, -CH[C(S)R']₂, -CH[C(O)OR']₂, -CH[C(S)OR']₂, -CH[C(O)SR']₂, -CH[C(S)SR']₂, -CH₂OR', or -CH₂SR'; or a 10 partially or completely saturated mono- or polycyclic aryl group, or a mono- or poly-heterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', or -SR'; and

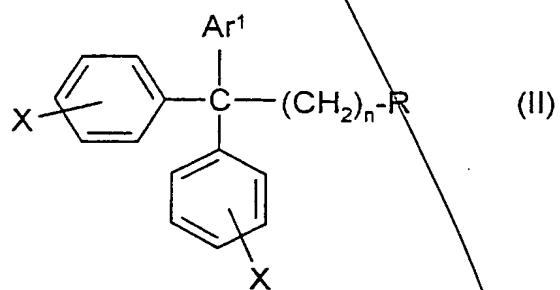
15 R' and R", independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

3. The use according to claim 2, wherein

20 the partially or completely saturated mono- or polycyclic aryl group is selected from the group consisting phenyl, biphenyl, naphthyl, or cyclopenta-2,4-diene-1-ylidene;

25 and the mono- or poly-heterocyclic group is A 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, in particular γ -butyrolactonyl.

30 4. The use according to claim 2, wherein the chemical compound is a triaryl methane derivative represented by the general Formula II



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

n is 0, 1, 2, 3, 4, 5 or 6;

Ar¹ represents a partially or completely saturated mono- or polycyclic aryl group, or a mono- or poly-heterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR'', -SR'', -R'OR'', -R'SR'', -C(O)R'', -C(S)R'', -C(O)OR'', -C(S)OR'', -C(O)SR'', -C(S)SR'', -C(O)NR'(OR'), -C(S)NR'(OR''), -C(O)NR'(SR''), -C(S)NR'(SR''), -CH(CN)₂, -C(O)NR''₂, -C(S)NR''₂, -CH[C(O)R'']₂, -CH[C(S)R'']₂, -CH[C(O)OR'']₂, -CH[C(S)OR'']₂, -CH[C(O)SR'']₂, -CH[C(S)SR'']₂, -CH₂OR'', or -CH₂SR'';

R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR''), -C(O)NR"(SR''), -C(S)NR"(SR''), -CH(CN)₂, -C(O)NR'₂, -C(S)NR'₂, -CH[C(O)R']₂, -CH[C(S)R']₂, -CH[C(O)OR']₂, -CH[C(S)OR']₂, -CH[C(O)SR']₂, -CH[C(S)SR']₂, -CH₂OR', or -CH₂SR'; or a partially or completely saturated mono- or polycyclic aryl group, or a mono- or poly-heterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', or -SR';

which triaryl methane derivative may further be substituted one or more times with a substituent X selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR'', -SR'', -R'OR'', -R'SR'', -C(O)R'', -C(S)R'', -C(O)OR'', -C(S)OR'', -C(O)SR'', -C(S)SR'', -C(O)NR'(OR''), -C(S)NR'(SR''), -CH(CN)₂, -C(O)NR''₂, -C(S)NR''₂, -CH[C(O)R'']₂, -CH[C(S)R'']₂, -CH[C(O)OR'']₂, -CH[C(S)OR'']₂, -CH[C(O)SR'']₂, -CH[C(S)SR'']₂, -CH₂OR'', or -CH₂SR''; and

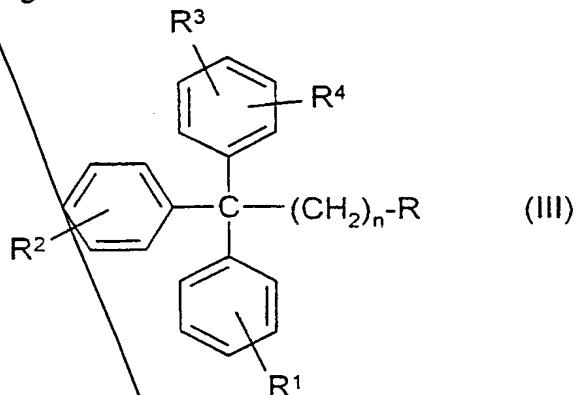
R' and R'', independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

35 5. The use according to claim 4, wherein

the partially or completely saturated mono- or polycyclic aryl group is selected from the group consisting phenyl, biphenyl, naphthyl, or cyclopenta-2,4-diene-1-ylidene; and

the mono- or poly-heterocyclic group is A 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, 5 pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, in particular γ -butyrolactonyl.

6. The use according to claim 2, wherein the triaryl methane derivative is represented by the general Formula III



10 and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

n is 0, 1, 2, 3, 4, 5, or 6;

15 R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -O(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR"(SR'), -C(S)NR"(SR'), -CH(CN)₂, -C(O)NR'₂, -C(S)NR'₂, -CH[C(O)R']₂, -CH[C(S)R']₂, -CH[C(O)OR']₂, -CH[C(S)OR']₂, -CH[C(O)SR']₂, -CH[C(S)SR']₂, -CH₂OR', or -CH₂SR'; or a 20 partially or completely saturated mono- or polycyclic aryl group, or a mono- or poly-heterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', or -SR';

25 R¹, R², R³ and R⁴, independently of each another, represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR'', -SR'', -R'OR'', -R'SR'', -C(O)R'', -C(S)R'', -C(O)OR'', -C(S)OR'', -C(O)SR'', -C(S)SR'', -C(O)NR'(OR''), -C(S)NR'(OR''), -C(O)NR'(SR''), -C(S)NR'(SR''), -CH(CN)₂, -C(O)NR'₂, -C(S)NR'₂, -CH[C(O)R']₂,

~~-CH[C(S)R"]₂, -CH[C(O)OR"]₂, -CH[C(S)OR"]₂, -CH[C(O)SR"]₂, -CH[C(S)SR"]₂, -CH₂OR", or -CH₂SR"; and~~

~~R" and R", independently of each other, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.~~

5

~~7. The use according to claim 6, wherein~~

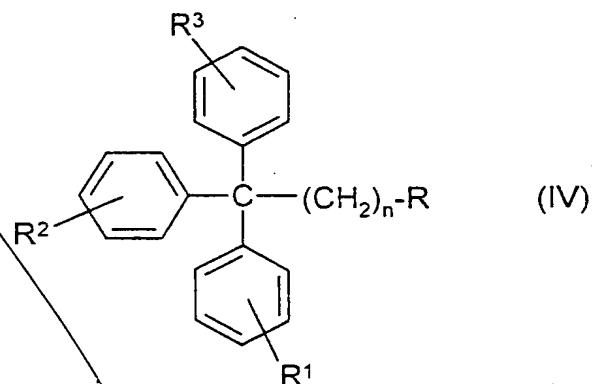
~~the partially or completely saturated mono- or polycyclic aryl group is selected from the group consisting phenyl, biphenyl, naphthyl, or cyclopenta-2,4-diene-1-ylidene; and~~

10

~~the mono- or poly-heterocyclic group is A 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thietyl, and butyrolactonyl, in particular γ -butyrolactonyl.~~

15

~~8. The use according to claim 2, wherein the triaryl methane derivative is represented by the general Formula IV~~



20

~~and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,~~

~~n is 0, 1, 2, 3, 4, 5, or 6;~~

25

~~R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR"(SR'), -C(S)NR"(SR'), -CH(CN)₂, -C(O)NR'₂, -C(S)NR'₂, -CH[C(O)R']₂, -CH[C(S)R']₂, -CH[C(O)OR']₂, -CH[C(S)OR']₂, -CH[C(O)SR']₂, -CH[C(S)SR']₂, -CH₂OR', or -CH₂SR'; or a partially or completely saturated mono- or polycyclic aryl group, or a mono- or~~

30

*Sub
D2*

poly-heterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', or -SR';

*Sub
D2*

5 R¹, R² and R³, independently of each another, represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR'', -SR'', -R'OR'', -R'SR'', -C(O)R'', -C(S)R'', -C(O)OR'', -C(S)OR'', -C(O)SR'', -C(S)SR'', -C(O)NR'(OR''), -C(S)NR'(OR''), 10 -C(O)NR'(SR''), -C(S)NR'(SR''), -CH(CN)₂, -C(O)NR''₂, -C(S)NR''₂, -CH[C(O)R'']₂, -CH[C(S)R'']₂, -CH[C(O)OR'']₂, -CH[C(S)OR'']₂, -CH[C(O)SR'']₂, -CH[C(S)SR'']₂, -CH₂OR'', or -CH₂SR''; and

*Sub
D2*

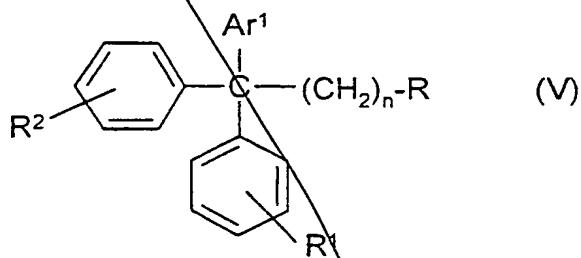
15 R' and R'', independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

15 9. The use according to claim 8, wherein

the partially or completely saturated mono- or polycyclic aryl group is selected from the group consisting phenyl, biphenyl, naphthyl, or cyclopenta-2,4-diene-1-ylidene; and

20 the mono- or poly-heterocyclic group is A 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, in particular γ -butyrolactonyl.

25 10. The use according to claim 2, wherein the triaryl methane derivative is represented by the general Formula V



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

n is 0, 1, 2, 3, 4, 5, or 6;

Ar¹ represents a partially or completely saturated mono- or polycyclic aryl group, or a mono- or poly-heterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR", -SR", -R'OR", -R'SR", -C(O)R", -C(S)R", -C(O)OR", -C(S)OR", -C(O)SR", -C(S)SR", -C(O)NR'(OR"), -C(S)NR'(OR"), -C(O)NR'(SR"), -C(S)NR'(SR"), -CH(CN)₂, -C(O)NR'₂, -C(S)NR'₂, -CH[C(O)R']₂, -CH[C(S)R']₂, -CH[C(O)OR']₂, -CH[C(S)OR']₂, -CH[C(O)SR']₂, -CH[C(S)SR']₂, -CH₂OR", or -CH₂SR";

R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR"(SR'), -C(S)NR"(SR'), -CH(CN)₂, -C(O)NR'₂, -C(S)NR'₂, -CH[C(O)R']₂, -CH[C(S)R']₂, -CH[C(O)OR']₂, -CH[C(S)OR']₂, -CH[C(O)SR']₂, -CH[C(S)SR']₂, -CH₂OR', or -CH₂SR'; or a partially or completely saturated mono- or polycyclic aryl group, or a mono- or poly-heterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', or -SR';

R¹ and R², independently of each another, represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR", -SR", -R'OR", -R'SR", -C(O)R", -C(S)R", -C(O)OR", -C(S)OR", -C(O)SR", -C(S)SR", -C(O)NR'(OR"), -C(S)NR'(OR"), -C(O)NR'(SR"), -C(S)NR'(SR"), -CH(CN)₂, -C(O)NR'₂, -C(S)NR'₂, -CH[C(O)R']₂, -CH[C(S)R']₂, -CH[C(O)OR']₂, -CH[C(S)OR']₂, -CH[C(O)SR']₂, -CH[C(S)SR']₂, -CH₂OR", or -CH₂SR"; and

R' and R", independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

30

11. The use according to claim 10, wherein

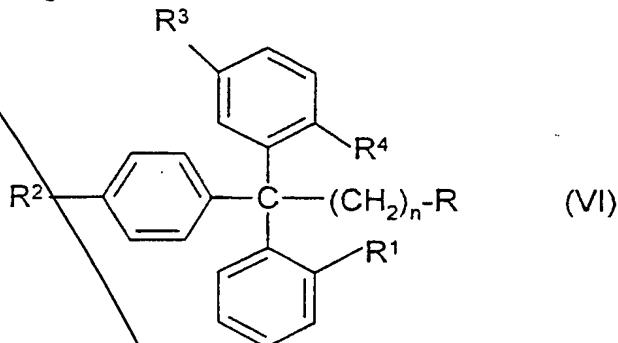
the partially or completely saturated mono- or polycyclic aryl group is selected from the group consisting phenyl, biphenyl, naphthyl, or cyclopenta-2,4-diene-1-ylidene; and

35

the mono- or poly-heterocyclic group is A 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl,

piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, in particular γ -butyrolactonyl.

5 12. The use according to claim 2, wherein the triaryl methane derivative is represented by the general Formula VI



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

10 *n* is 0, 1, 2, 3, 4, 5, or 6;

R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR"(SR'), -C(S)NR"(SR'), -CH(CN)₂, -C(O)NR'₂, -C(S)NR'₂, -CH[C(O)R']₂, -CH[C(S)R']₂, -CH[C(O)OR']₂, -CH[C(S)OR']₂, -CH[C(O)SR']₂, -CH[C(S)SR']₂, -CH₂OR', or -CH₂SR'; or a partially or completely saturated mono- or polycyclic aryl group, or a mono- or poly-heterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', or -SR';

25 *R*¹, *R*², *R*³ and *R*⁴, independently of each another, represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR'', -SR'', -R'OR'', -R'SR'', -C(O)R'', -C(S)R'', -C(O)OR'', -C(S)OR'', -C(O)SR'', -C(S)SR'', -C(O)NR'(OR''), -C(S)NR'(OR''), -C(O)NR'(SR''), -C(S)NR'(SR''), -CH(CN)₂, -C(O)NR'₂, -C(S)NR'₂, -CH[C(O)R'']₂, -CH[C(S)R'']₂, -CH[C(O)OR'']₂, -CH[C(S)OR'']₂, -CH[C(O)SR'']₂, -CH[C(S)SR'']₂, -CH₂OR'', or -CH₂SR''; and

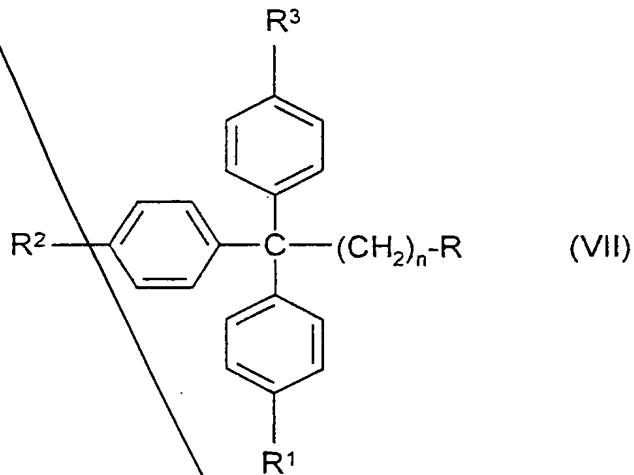
30 *R'* and *R''*, independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

13. The use according to claim 12, wherein

the partially or completely saturated mono- or polycyclic aryl group is selected from the group consisting phenyl, biphenyl, naphthyl, or cyclopenta-2,4-diene-1-ylidene; and

5 the mono- or poly-heterocyclic group is A 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, 10 pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, in particular γ -butyrolactonyl.

14. The use according to claim 2, wherein the triaryl methane derivative is represented by the general Formula VII



15

and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

n is 0, 1, 2, 3, 4, 5, or 6;

20 R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR'(SR'), -C(S)NR'(SR'), -CH(CN)₂, -C(O)NR'₂, -C(S)NR'₂, -CH[C(O)R']₂, -CH[C(S)R']₂, -CH[C(O)OR']₂, -CH[C(S)OR']₂, -CH[C(O)SR']₂, -CH[C(S)SR']₂, -CH₂OR', or -CH₂SR'; or a 25 partially or completely saturated mono- or polycyclic aryl group, or a mono- or poly-heterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group

consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', or -SR';

R¹, R² and R³, independently of each another, represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR'', -SR'', -R'OR'', -R'SR'', -C(O)R'', -C(S)R'', -C(O)OR'', -C(S)OR'', -C(O)SR'', -C(S)SR'', -C(O)NR'(OR''), -C(S)NR'(OR''), -C(O)NR(SR''), -C(S)NR'(SR''), -CH(CN)₂, -C(O)NR''₂, -C(S)NR''₂, -CH[C(O)R'']₂, -CH[C(S)R'']₂, -CH[C(O)OR'']₂, -CH[C(S)OR'']₂, -CH[C(O)SR'']₂, -CH[C(S)SR'']₂, -CH₂OR'', or -CH₂SR''; and

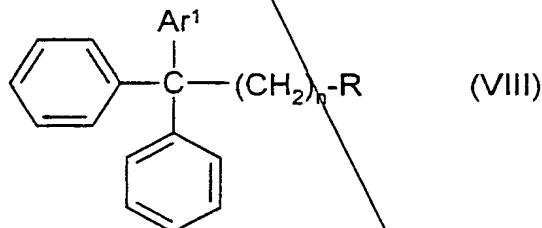
R' and R'', independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

15. The use according to claim 14, wherein

the partially or completely saturated mono- or polycyclic aryl group is selected from the group consisting phenyl, biphenyl, naphthyl, or cyclopenta-2,4-diene-1-ylidene; and

the mono- or poly-heterocyclic group is A 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, in particular γ -butyrolactonyl.

25 16. The use according to claim 2, wherein the triaryl methane derivative is represented by the general Formula VIII



and a pharmaceutically acceptable salt or an oxide or a hydrate thereof, wherein,

30 n is 0, 1, 2, 3, 4, 5, or 6;

Ar¹ represents a partially or completely saturated mono- or polycyclic aryl group, or a mono- or poly-heterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from

the group consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR", -SR", -R'OR", -R'SR", -C(O)R", -C(S)R", -C(O)OR", -C(S)OR", -C(O)SR", -C(S)SR", -C(O)NR'(OR"), -C(S)NR'(OR"), -C(O)NR'(SR"), -C(S)NR'(SR"), -CH(CN)₂, 5 -C(O)NR'₂, -C(S)NR"₂, -CH[C(O)R"]₂, -CH[C(S)R"]₂, -CH[C(O)OR"]₂, -CH[C(S)OR"]₂, -CH[C(O)SR"]₂, -CH[C(S)SR"]₂, -CH₂OR", or -CH₂SR";

R represents hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', -SR', -R"OR', -R"SR', -C(O)R', -C(S)R', -C(O)OR', -C(S)OR', -C(O)SR', -C(S)SR', -C(O)NR"(OR'), -C(S)NR"(OR'), -C(O)NR"(SR'), -C(S)NR"(SR'), -CH(CN)₂, 10 -C(O)NR'₂, -C(S)NR'₂, -CH[C(O)R']₂, -CH[C(S)R']₂, -CH[C(O)OR']₂, -CH[C(S)OR']₂, -CH[C(O)SR']₂, -CH[C(S)SR']₂, -CH₂OR', or -CH₂SR'; or a partially or completely saturated mono- or polycyclic aryl group, or a mono- or poly-heterocyclic group, which mono- or polycyclic groups may optionally be substituted one or more times with substituents selected from the group 15 consisting of hydrogen, halogen, trihalogenmethyl, alkyl, cycloalkyl, alkenyl, alkynyl, amino, nitro or cyano, or a group of the formula -OR', or -SR';

R' and R", independently of each another, represents hydrogen, alkyl, cycloalkyl, alkenyl, alkynyl, or alkoxy.

20 17. The use according to claim 16, wherein

the partially or completely saturated mono- or polycyclic aryl group is selected from the group consisting phenyl, biphenyl, naphthyl, or cyclopenta-2,4-diene-1-ylidene; and

25 the mono- or poly-heterocyclic group is A 5- and 6 membered heterocyclic monocyclic group selected from the group consisting of furanyl, imidazolyl, isoimidazolyl, 2-isoimidazolyl, isothiazolyl, isoxazolyl, 1,2,3-oxadiazolyl, 1,2,4-oxadiazolyl, 1,2,5-oxadiazolyl, 1,3,4-oxadiazolyl, oxazolyl, piperidyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolidinyl, 30 pyrrolyl, thiadiazolyl, thiazolyl, thienyl, and butyrolactonyl, in particular γ -butyrolactonyl.

18. The use according to claim 2, wherein the compound is

(4-chlorophenyl-diphenyl)-carbinol;

35 Ethyl 2-phenyl-2-(1-piperidyl)-phenylacetate; or

1,1,1-triphenylacetone;

or a pharmaceutically acceptable salt or an oxide or a hydrate hereof.

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19. The use according to any of claims 1-18, wherein the disease, disorder or condition relating to immune dysfunction is an auto-immune disease, e.g. Addison's disease, alopecia areata, Ankylosing spondylitis, haemolytic anemia (anemia haemolytica), pernicious anemia (anemia perniciosa), aphthae, aphthous stomatitis, arthritis, arteriosclerotic disorders, osteoarthritis, rheumatoid arthritis, aspermiogenesis, asthma bronchiale, auto-immune asthma, auto-immune hemolysis, Bechet's disease, Boeck's disease, inflammatory bowel disease, Burkitt's lymphoma, Chron's disease, choroiditis, colitis ulcerosa, Coeliac disease, cryoglobulinemia, dermatitis herpetiformis, dermatomyositis, insulin-dependent type I diabetes, juvenile diabetes, idiopathic diabetes insipidus, insulin-dependent diabetes mellitus, auto-immune demyelinating diseases, Dupuytren's contracture, encephalomyelitis, encephalomyelitis allergica, endophthalmia phacoanaphylactica, enteritis allergica, autoimmune enteropathy syndrome, erythema nodosum leprosum, idiopathic facial paralysis, chronic fatigue syndrome, febris rheumatica, glomerulo nephritis, Goodpasture's syndrome, Graves' disease, Hamman-Rich's disease, Hashimoto's disease, Hashimoto's thyroiditis, sudden hearing loss, sensoneural hearing loss, hepatitis chronica, Hodgkin's disease, haemoglobinuria paroxysmatica, hypogonadism, ileitis regionalis, iritis, leucopenia, leucemia, lupus erythematosus disseminatus, systemic lupus erythematosus, cutaneous lupus erythematosus, lymphogranuloma malignum, mononucleosis infectiosa, myasthenia gravis, traverse myelitis, primary idiopathic myxedema, nephrosis, ophthalmia sympathica, orchitis granulomatosa, pancreatitis, pemphigus, pemphigus vulgaris, polyarteritis nodosa, polyarthritis chronica primaria, polymyositis, polyradiculitis acuta, psoriasis, purpura, pyoderma gangrenosum, Quervain's thyreoiditis, Reiter's syndrome, sarcoidosis, ataxic sclerosis, progressive systemic sclerosis, scleritis, sclerodermia, multiple sclerosis, sclerosis disseminata, acquired spenic atrophy, infertility due to antispermatozoan antibodies, thrombocytopenia, idiopathic thrombocytopenia purpura, thymoma, acute anterior uveitis, vitiligo, AIDS, HIV, SCID and Epstein Barr virus associated diseases such as Sjogren's syndrome, virus (AIDS or EBV) associated B cell lymphoma, parasitic diseases such as Leishmania, and immune-suppressed disease states such as viral infections following allograft transplantations, graft vs. Host syndrome, transplant rejection, or AIDS, cancer, chronic active hepatitis diabetes, toxic shock syndrome, food poisoning, or transplant rejection.

Sub A
20. The use according to claims 1-19, for the manufacture of a medicament which medicament further comprises a pharmaceutically effective amount of a conventional immune suppressing agent.

Sub C2
5 21. The use according to claim 20, wherein the immune-suppressing agent is Amphotericin, Busulphan, Co-trimoxazole, Chlorambucil, colony stimulating factors, corticosteroids, Cyclophosphamide, Fluconazole, folinic acid, Ganciclovir, antilymphocyte immunoglobulins, normal immunoglobulins, Methotrexate, Methylprednisolone, Octreotide, Oxpentifylline, Tacrolimus (FK506), Thalidomide, Zolimomab artox, or the calcineurin inhibitors (protein phosphatase 2B inhibitors), in particular Cyclosporin.

Sub C1
15 22. A method for of treatment, prevention or alleviation of a disease or a disorder or a condition related to immune dysfunction, which method comprises the step of administering to such a living animal body in need thereof a therapeutically effective amount of a chemical compound having selective IK_{Ca} inhibitory activity.

20 23. The method according to claim 22, wherein the disease, disorder or condition relating to immune dysfunction is an auto-immune disease, e.g. Addison's disease, alopecia areata, Ankylosing spondylitis, haemolytic anemia (anemia haemolytica), pernicious anemia (anemia perniciosa), aphthae, aphthous stomatitis, arthritis, arteriosclerotic disorders, osteoarthritis, rheumatoid arthritis, aspermiogenesis, asthma bronchiale, auto-immune asthma, auto-immune hemolysis, Bechet's disease, Boeck's disease, inflammatory bowel disease, Burkitt's lymphoma, Chron's disease, chorioiditis, colitis ulcerosa, Coeliac disease, cryoglobulinemia, dermatitis herpetiformis, dermatomyositis, insulin-dependent type I diabetes, juvenile diabetes, idiopathic diabetes insipidus, insulin-dependent diabetes mellitus, auto-immune demyelinating diseases, 25 Dupuytren's contracture, encephalomyelitis, encephalomyelitis allergica, endophthalmia phacoanaphylactica, enteritis allergica, autoimmune enteropathy syndrome, erythema nodosum leprosum, idiopathic facial paralysis, chronic fatigue syndrome, febris rheumatica, glomerulo nephritis, Goodpasture's syndrome, Graves' disease, Hamman-Rich's disease, Hashimoto's disease, 30 Hashimoto's thyroiditis, sudden hearing loss, sensoneural hearing loss, hepatitis chronica, Hodgkin's disease, haemoglobinuria paroxysmata, hypogonadism, ileitis regionalis, iritis, leucopenia, leucemia, lupus erythematosus disseminatus, systemic lupus erythematosus, cutaneous lupus erythematosus,

lymphogranuloma malignum, mononucleosis infectiosa, myasthenia gravis, 5 traverse myelitis, primary idiopathic myxedema, nephrosis, ophthalmia sympathica, orchitis granulomatosa, pancreatitis, pemphigus, pemphigus vulgaris, polyarteritis nodosa, polyarthritis chronica primaria, polymyositis, polyradiculitis acuta, psoriasis, purpura, pyoderma gangrenosum, Quervain's 10 thyroiditis, Reiter's syndrome, sarcoidosis, ataxic sclerosis, progressive systemic sclerosis, scleritis, sclerodermia, multiple sclerosis, sclerosis disseminata, acquired spastic atrophy, infertility due to antispermatozoan antibodies, thrombocytopenia, idiopathic thrombocytopenia purpura, thymoma, 15 acute anterior uveitis, vitiligo, AIDS, HIV, SCID and Epstein Barr virus associated diseases such as Sjogren's syndrome, virus (AIDS or EBV) associated B cell lymphoma, parasitic diseases such as Leishmania, and immune-suppressed disease states such as viral infections following allograft transplantations, graft vs. Host syndrome, transplant rejection, or AIDS, cancer, chronic active hepatitis diabetes, toxic shock syndrome, food poisoning, or transplant rejection.

*Sub
C*

24. The method according to either of claims 22-23, which method comprises simultaneous administration of the chemical compound having selective IK_{Ca} inhibitory activity and a pharmaceutically effective amount of a conventional immune suppressing agent.

25. The method according to claim 24, wherein the immune-suppressing agent is Amphotericin, Busulphan, Co-trimoxazole, Chlorambucil, colony stimulating factors, corticosteroids, Cyclophosphamide, Fluconazole, folinic acid, Ganciclovir, antilymphocyte immunoglobulins, normal immunoglobulins, Methotrexate, Methylprednisolone, Octreotide, Oxpentifyline, Tacrolimus (FK506), Thalidomide, Zolimomab artox, or the calcineurin inhibitors (protein phosphatase 2B inhibitors), in particular Cyclosporin.

*add
C4*